Name: Date:

PCW_09_22 Coordinate transformations v11

Question 1

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] \;=\; \frac{f[6x+2]}{3} + 4$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 2

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] \;=\; \frac{f\left[\frac{x}{4} - 3\right]}{9} - 5$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 3

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] \;=\; \frac{f[6\,(x+4)] - 8}{3}$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

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Question 4

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] \;=\; \frac{f\left[\frac{x}{9}+4\right]+8}{3}$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 5

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] \;=\; 5\cdot\left(f\left[\frac{x+9}{2}\right]-8\right)$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 6

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] \;=\; 5\cdot\left(f\left[\frac{x-6}{8}\right]+2\right)$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.